

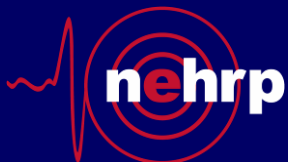
National Earthquake Hazards Reduction Program

... a research and implementation partnership

Program Overview

Advisory Committee on Earthquake Hazards Reduction

9-10 November 2016



FEMA

NIST
National Institute of
Standards and Technology



USGS
science for a changing world

national **earthquake** hazards reduction program

Outline

- ACEHR Update
- Recently Posted NEHRP Agency Budgets
- NIST NEHRP Leadership Transition
- NIST NEHRP Reports Thumb Drives
- Executive Order 13717-Related Activities
- ICC Update (*separate presentation*)

This presentation provides NEHRP-wide & Secretariat updates.

Each agency provided details on its activities.



ACEHR Update



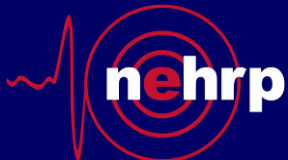
Continuing members:

Ralph Archuleta
Jane Bullock
Craig Davis
John Gillengerten
Jim Goltz
Nathan Gould
Bob Herrmann
Laurie Johnson (Chair)
Ron Lynn
Lisa Ludwig
Peter May
Lori Peek

ACEHR last met face-to-face on 3-4 March 2016 at NIST, Gaithersburg, MD.

New members appointed since the last meeting: Gregory Deierlein, Ryan Kersting, Glenn Rix, and David Simpson.

ACEHR submitted interim letter report to NIST Director on 19 May 2016.



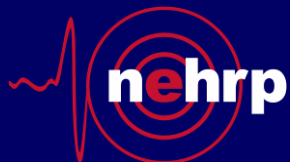
national **earthquake** hazards reduction program

2005-2010 NEHRP Agency Budgets¹

Enacted Agency NEHRP Budgets (\$M) ¹					
FY	FEMA ²	NIST ³	NSF ⁴	USGS ⁵	NEHRP Total
2005	14.7	0.9	53.1	58.3	127.0
2006	9.5	0.9	53.8	54.5	118.7
2007	7.2	1.7	54.2	55.1	118.2
2008	6.1	1.7	53.6	58.1	119.5
2009	9.1	4.1	56.0	61.2	130.4
2010	9.0	4.1	55.0	62.8	130.9

Notes:

1. Enacted budgets shown were reported by agencies as of 07/25/16. FEMA (DHS) & NIST budgets were those agencies' allocations for NEHRP activities from total agency appropriations. NSF budget was its expenditure for NEHRP activities from total agency appropriations. USGS budgets were amounts appropriated for USGS NEHRP activities. 2009 ARRA funds are not included in totals. Amounts are reported to nearest \$0.1M.
2. 2005 FEMA enacted NEHRP budget included program activities and employee salaries & expenses (S&E). 2005-2009 FEMA NEHRP budgets excluded state grants. 2006-2010 FEMA NEHRP budgets covered all program activities, excluding S&E costs.
3. 2005 NIST NEHRP budget supported NIST earthquake engineering research. 2006-2010 NIST NEHRP budgets supported expenses for both NEHRP Secretariat (Lead Agency) and NIST Earthquake Risk Reduction in Buildings & Infrastructure R&D Program.
4. NSF NEHRP expenditures supported program activities, excluding Agency Operations and Award Management (AOAM) costs. Budget included support for George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES) and Global Seismographic Network (GSN), but excluding EarthScope activities.
5. USGS budget supported program activities, including the USGS Earthquake Hazards Program (EHP) and USGS portion of GSN.

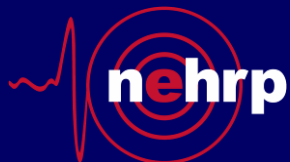


2011-2016 NEHRP Agency Budgets¹

Enacted Agency NEHRP Budgets (\$M) ¹					
FY	FEMA ²	NIST ³	NSF ⁴	USGS ⁵	NEHRP Total
2011	7.8	4.1	55.3	61.4	128.6
2012	7.8	4.1	53.2	59.0	124.1
2013	7.8	3.9	52.2	55.6	119.5
2014	7.5	3.9	42.0	58.7	112.1
2015	7.5	3.9	52.2	64.4	128.0
2016	8.5	5.2	54.2	67.0	134.9

Notes:

1. Enacted budgets shown were reported by agencies as of 07/25/16. FEMA (DHS) & NIST budgets are those agencies' allocations for NEHRP activities from total agency appropriations. NSF budget is its expenditure for NEHRP activities from total agency appropriations. USGS budget is amount appropriated for USGS NEHRP activities. Amounts are reported to nearest \$0.1M.
2. 2011-2015 FEMA NEHRP budgets covered all program activities, excluding employee salaries & expenses (S&E). 2016 FEMA NEHRP budget covers all program activities, including S&E.
3. NIST NEHRP budgets support expenses for both NEHRP Secretariat (Lead Agency) and NIST Earthquake Risk Reduction in Buildings & Infrastructure R&D Program. 2016 NIST NEHRP budget includes \$1.3M of new Disaster Resilience Initiative funding.
4. NSF NEHRP expenditures support program activities, excluding Agency Operations and Award Management (AOAM) costs and EarthScope activities. 2011-2014 expenditures included support for George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES) and Global Seismographic Network (GSN). 2015-2016 expenditures include support for GSN and the earthquake engineering portion of the Natural Hazards Research Infrastructure (NHERI).
5. USGS budget supports program activities, including the USGS Earthquake Hazards Program (EHP) and the USGS portion of the GSN.

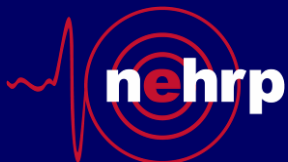


2017 Requested Funding for NEHRP Agencies¹

Requested Agency NEHRP Budgets (\$M) ¹					
FY	FEMA ²	NIST ³	NSF ⁴	USGS ⁵	NEHRP Total
2017	8.5	5.9	54.2	69.5	138.1

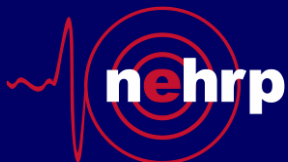
Notes:

1. FY 2017 Administration-requested budgets shown were reported by agencies as of 07/25/16. FEMA (DHS), NIST, & NSF budgets are those agencies' planned allocations for NEHRP activities from total requested agency appropriations. USGS budget is amount requested for USGS NEHRP activities. Amounts are reported to nearest \$0.1M.
2. FEMA requested NEHRP budget includes program activities, including employee salaries & expenses (S&E).
3. NIST requested NEHRP budget supports expenses for both NEHRP Secretariat (Lead Agency) and NIST Earthquake Risk Reduction in Buildings & Infrastructure R&D Program. NIST NEHRP budget includes \$2.0M of new Disaster Resilience Initiative funding.
4. NSF requested NEHRP budget supports program activities, excluding Agency Operations and Award Management (AOAM) costs. Budget includes support for the Global Seismographic Network (GSN) and the earthquake engineering portion of the Natural Hazards Research Infrastructure (NHERI), but excludes EarthScope activities.
5. USGS requested budget supports program activities, including the USGS Earthquake Hazards Program (EHP) the USGS portion of the GSN (\$7.3M).
6. Agencies currently under Continuing Budget Resolution through 9 December – at FY 2016 budget levels.

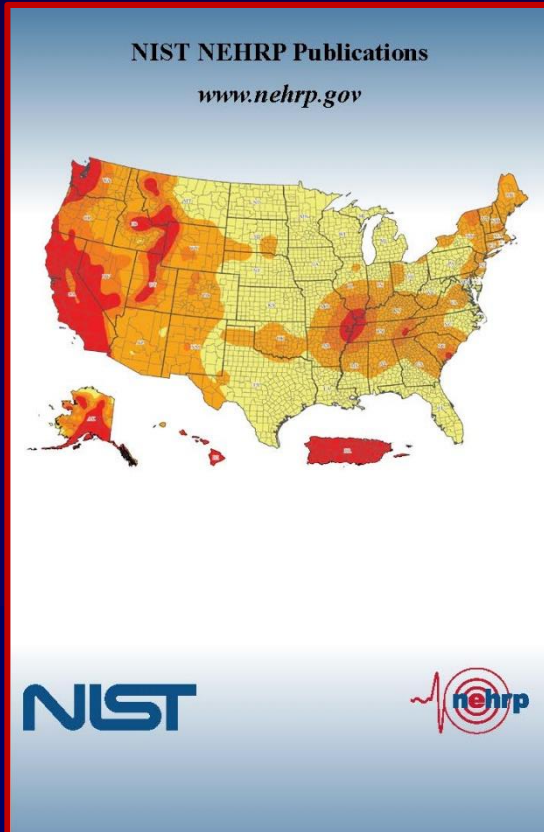


NIST NEHRP Leadership Transition

- Incumbent NEHRP Director retires on 12/30/16
- Current Earthquake Engineering Group Leader will assume role of Acting NEHRP Director on 12/31/16
- NIST Engineering Laboratory leaders will determine future course of action regarding permanent NEHRP Director role



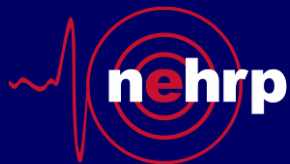
NIST NEHRP Thumb Drives



- Part of ACEHR-recommended outreach improvement
- Initial delivery shortly after March ACEHR meeting
- NIST followed what FEMA had done successfully ... why waste a good idea!
- Available for dissemination at conferences and for visitors

Executive Order 13717 Update

(Overview originally presented at March 2016 ACEHR meeting)



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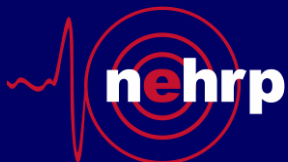
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Executive Order 13717 Summary

Establishing a Federal Earthquake Risk Management Standard

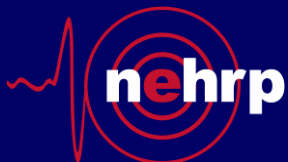
- Followed a lengthy study by the Mitigation Framework Leadership Group (MitFLG) that resulted in actions recommended to Executive Office of the President (EOP).
- Issued by President on 2 February 2016.
- Revoked old EO's 12699 and 12941.
- Policy/Philosophy:
 - Strengthen national security and resilience for the earthquake hazard – promote public safety, economic strength, and national security.
 - Recognizes that consensus codes and standards focus on life safety and encourages agencies to “go beyond” codes and standards requirements to achieve resilience.



Executive Order 13717 Implementation

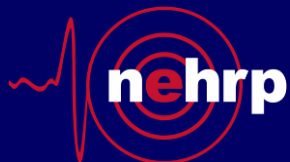
Establishing a Federal Earthquake Risk Management Standard

- NIST & FEMA are currently engaged with Executive Office of the President (NSC, OMB, OSTP) and with affected agencies to develop comprehensive implementation guidelines – will be published as a Recommended Practice document of the Interagency Committee on Seismic Safety in Construction (ICSSC), ICSSC RP 9
- Parallel ongoing effort: Update for ICSSC RP 8, *Standards of Seismic Safety for Existing Federally Owned and Leased Buildings*



Executive Order 13717 Update

(Following slides for ACEHR info, not for presentation)



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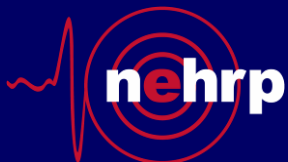
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Establishing a Federal Earthquake Risk Management Standard

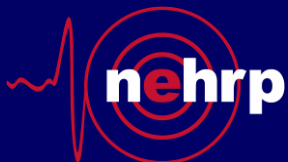
- Basic requirements for **new** Federal buildings:
 - **Owned Buildings:** Agencies **shall** adhere to the **earthquake-resistant provisions** of the 2015 International Building Code (IBC), and all associated references (e.g. ASCE 7), as well as adopting future updated editions of IBC (subject to agency determination that each updated edition is a nationally recognized building code).
 - **Leased Buildings:** For new buildings being constructed for a Federal agency, same procedures as those for owned buildings **shall** apply, to the extent permitted by law.
 - **Federally Assisted or Regulated Buildings:** Agencies **shall consider** applying same procedures as those for owned buildings.



Executive Order 13717

Establishing a Federal Earthquake Risk Management Standard

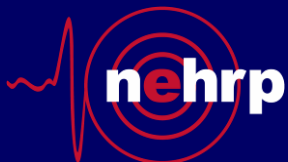
- Basic requirements for **existing** Federal buildings:
 - **Owned Buildings:** Agencies **shall** adhere to the provisions of ICSSC RP 8, *Standards of Seismic Safety for Existing Federally Owned and Leased Buildings*, and its successors.
 - **Leased Buildings:** ICSSC RP 8 and its successors **shall** be applied. Note: RP 8 provides exemptions for situations involving small Federally leased spaces in larger buildings, depending on seismicity.
 - **Federally Assisted or Regulated Buildings:** No specific requirements.



Executive Order 13717

Establishing a Federal Earthquake Risk Management Standard

- Agency & committee responsibilities:
 - Recognizes ICSSC as leadership body to address earthquake issues in Federal building construction, with NEHRP Lead Agency responsible for leading ICSSC and developing guidelines.
 - Agencies **shall** designate Seismic Safety Coordinators to NIST (*de facto* ICSSC members) within **30 days of date of EO**.
 - NIST **shall** issue implementing guidelines for the EO, **within 8 months of date of EO**, and assist agencies in interpreting the guidelines.
 - NIST **shall** support the ICSSC, and the ICSSC shall update the RP 8 Standards **at least once per 6 years**.
 - Agencies **shall** report their progress in implementing the EO to NIST, for inclusion in NEHRP report to Congress, on a biennial basis.



Executive Order 13717

Establishing a Federal Earthquake Risk Management Standard

- Other general provisions:
 - Implementation of EO is responsibility of each individual agency.
 - Agencies are free to require higher-than-code performance levels for any of their buildings.
 - Agency heads may exempt a building from the EO provisions if the head determines that the building is substantially related to an important law enforcement purpose or exemption is needed to address extraordinary circumstance related to national security or public safety (OMB Director must be notified).

